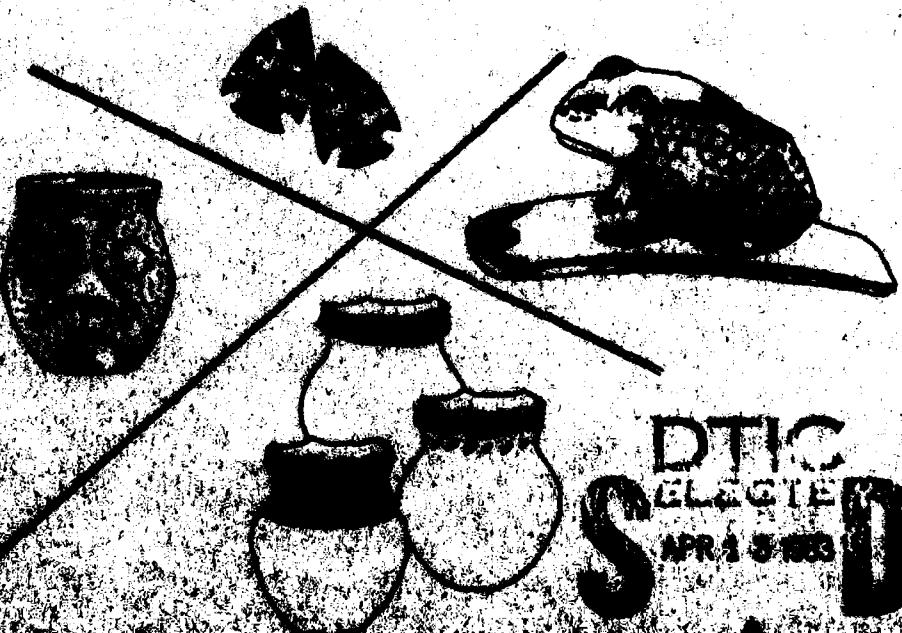


**UPPER LAKES
ARCHAEOLOGICAL
RESEARCH CENTER, INC.**

AD A 1 2 6 7 4 6

Reports of Investigation No. 98

ARCHAEOLOGICAL SURVEY AND TESTING
FOR BORROW AREA, MILAN, ILLINOIS
LOCAL FLOOD PROTECTION PROJECT



ARCHAEOLOGICAL SURVEY AND TESTING FOR BORROW AREA, MILAN, ILLINOIS
LOCAL FLOOD PROTECTION PROJECT.

1982

Submitted to: US Army Engineer District
Corps of Engineers
Clock Tower Building
Rock Island, Illinois 61201

Submitted by: Great Lakes Archaeological
Research Center, Inc.
P.O. Box 1304
Waukesha, WI 53187
Allen P. Van Dyke
Principal Investigator

In Fulfillment of DACW25-80-M-1795,
US Army Corps of Engineers, Rock
Island District, Rock Island, Illinois.

ABSTRACT

In September 1980, Great Lakes Archaeological Research Center, Inc., (GLARC, Inc.), conducted archaeological survey of a borrow area for the US Army Corps of Engineers, as part of the Milan Local Flood Protection Plan, Milan Illinois (Figure 1). The purpose of the project was to inventory the proposed area for the presence of cultural resources, and, in the event that any were discovered, evaluate them in terms of the specific criteria for inclusion in the National Register of Historic Places. This effort did locate two surface distribution of archaeological materials, one containing a mixture of materials of probable Early Archaic cultural affiliation, and another surface scatter of unknown affiliation. Two additional finds were made; one, a projectile point tip and the other, two chert flakes. Intensive surface examinations of the two find spots resulted in the determination that the two were indeed isolated finds.

Both of the larger scatters of archaeological materials were evaluated in terms of specific criteria for inclusion in the National Register of Historic Places. The evaluation process included controlled excavation of nine 1x1 meter units on one site and eight 1x1 meter units on the other site. Both sites were intensively surface collected. Surface distributions were found to be mainly at the bases of the slope with considerably less debitage and fewer artifacts located on the top portion of the hill where the sites were thought to have been during occupation. Our evaluation concluded that the sites are probably not potentially eligible for inclusion in the National Register of Historic Places.

The following report details the methods and results of investigations.



25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
8010
8011
8012
8013
8014
8015
8016
8017
8018
8019
8020
8021
8022
8023
8024
8025
8026
8027
8028
8029
8030
8031
8032
8033
8034
8035
8036
8037
8038
8039
8040
8041
8042
8043
8044
8045
8046
8047
8048
8049
8050
8051
8052
8053
8054
8055
8056
8057
8058
8059
8060
8061
8062
8063
8064
8065
8066
8067
8068
8069
8070
8071
8072
8073
8074
8075
8076
8077
8078
8079
8080
8081
8082
8083
8084
8085
8086
8087
8088
8089
8090
8091
8092
8093
8094
8095
8096
8097
8098
8099
80100
80101
80102
80103
80104
80105
80106
80107
80108
80109
80110
80111
80112
80113
80114
80115
80116
80117
80118
80119
80120
80121
80122
80123
80124
80125
80126
80127
80128
80129
80130
80131
80132
80133
80134
80135
80136
80137
80138
80139
80140
80141
80142
80143
80144
80145
80146
80147
80148
80149
80150
80151
80152
80153
80154
80155
80156
80157
80158
80159
80160
80161
80162
80163
80164
80165
80166
80167
80168
80169
80170
80171
80172
80173
80174
80175
80176
80177
80178
80179
80180
80181
80182
80183
80184
80185
80186
80187
80188
80189
80190
80191
80192
80193
80194
80195
80196
80197
80198
80199
80200
80201
80202
80203
80204
80205
80206
80207
80208
80209
80210
80211
80212
80213
80214
80215
80216
80217
80218
80219
80220
80221
80222
80223
80224
80225
80226
80227
80228
80229
80230
80231
80232
80233
80234
80235
80236
80237
80238
80239
80240
80241
80242
80243
80244
80245
80246
80247
80248
80249
80250
80251
80252
80253
80254
80255
80256
80257
80258
80259
80260
80261
80262
80263
80264
80265
80266
80267
80268
80269
80270
80271
80272
80273
80274
80275
80276
80277
80278
80279
80280
80281
80282
80283
80284
80285
80286
80287
80288
80289
80290
80291
80292
80293
80294
80295
80296
80297
80298
80299
80300
80301
80302
80303
80304
80305
80306
80307
80308
80309
80310
80311
80312
80313
80314
80315
80316
80317
80318
80319
80320
80321
80322
80323
80324
80325
80326
80327
80328
80329
80330
80331
80332
80333
80334
80335
80336
80337
80338
80339
80340
80341
80342
80343
80344
80345
80346
80347
80348
80349
80350
80351
80352
80353
80354
80355
80356
80357
80358
80359
80360
80361
80362
80363
80364
80365
80366
80367
80368
80369
80370
80371
80372
80373
80374
80375
80376
80377
80378
80379
80380
80381
80382
80383
80384
80385
80386
80387
80388
80389
80390
80391
80392
80393
80394
80395
80396
80397
80398
80399
80400
80401
80402
80403
80404
80405
80406
80407
80408
80409
80410
80411
80412
80413
80414
80415
80416
80417
80418
80419
80420
80421
80422
80423
80424
80425
80426
80427
80428
80429
80430
80431
80432
80433
80434
80435
80436
80437
80438
80439
80440
80441
80442
80443
80444
80445
80446
80447
80448
80449
80450
80451
80452
80453
80454
80455
80456
80457
80458
80459
80460
80461
80462
80463
80464
80465
80466
80467
80468
80469
80470
80471
80472
80473
80474
80475
80476
80477
80478
80479
80480
80481
80482
80483
80484
80485
80486
80487
80488
80489
80490
80491
80492
80493
80494
80495
80496
80497
80498
80499
80500
80501
80502
80503
80504
80505
80506
80507
80508
80509
80510
80511
80512
80513
80514
80515
80516
80517
80518
80519
80520
80521
80522
80523
80524
80525
80526
80527
80528
80529
80530
80531
80532
80533
80534
80535
80536
80537
80538
80539
80540
80541
80542
80543
80544
80545
80546
80547
80548
80549
80550
80551
80552
80553
80554
80555
80556
80557
80558
80559
80560
80561
80562
80563
80564
80565
80566
80567
80568
80569
80570
80571
80572
80573
80574
80575
80576
80577
80578
80579
80580
80581
80582
80583
80584
80585
80586
80587
80588
80589
80590
80591
80592
80593
80594
80595
80596
80597
80598
80599
80600
80601
80602
80603
80604
80605
80606
80607
80608
80609
80610
80611
80612
80613
80614
80615
80616
80617
80618
80619
80620
80621
80622
80623
80624
80625
80626
80627
80628
80629
80630
80631
80632
80633
80634
80635
80636
80637
80638
80639
80640
80641
80642
80643
80644
80645
80646
80647
80648
80649
80650
80651
80652
80653
80654
80655
80656
80657
80658
80659
80660
80661
80662
80663
80664
80665
80666
80667
80668
80669
80670
80671
80672
80673
80674
80675
80676
80677
80678
80679
80680
80681
80682
80683
80684
80685
80686
80687
80688
80689
80690
80691
80692
80693
80694
80695
80696
80697
80698
80699
80700
80701
80702
80703
80704
80705
80706
80707
80708
80709
80710
80711
80712
80713
80714
80715
80716
80717
80718
80719
80720
80721
80722
80723
80724
80725
80726
80727
80728
80729
80730
80731
80732
80733
80734
80735
80736
80737
80738
80739
80740
80741
80742
80743
80744
80745
80746
80747
80748
80749
80750
80751
80752
80753
80754
80755
80756
80757
80758
80759
80760
80761
80762
80763
80764
80765
80766
80767
80768
80769
80770
80771
80772
80773
80774
80775
80776
80777
80778
80779
80780
80781
80782
80783
80784
80785
80786
80787
80788
80789
80790
80791
80792
80793
80794
80795
80796
80797
80798
80799
80800
80801
80802
80803
80804
80805
80806
80807
80808
80809
80810
80811
80812
80813
80814
80815
80816
80817
80818
80819
80820
80821
80822
80823
80824
80825
80826
80827
80828
80829
80830
80831
80832
80833
80834
80835
80836
80837
80838
80839
80840
80841
80842
80843
80844
80845
80846
80847
80848
80849
80850
80851
80852
80853
80854
80855
80856
80857
80858
80859
80860
80861
80862
80863
80864
80865
80866
80867
80868
80869
80870
80871
80872
80873
80874
80875
80876
80877
80878
80879
80880
80881
80882
80883
80884
80885
80886
80887
80888
80889
80890
80891
80892
80893
80894
80895
80896
80897
80898
80899
80900
80901
80902
80903
80904
80905
80906
80907
80908
80909
80910
80911
80912
80913
80914
80915
80916
80917
80918
80919
80920
80921
80922
80923
80924
80925
80926
80927
80928
80929
80930
80931
80932
80933
80934
80935
80936
80937
80938
80939
80940
80941
80942
80943
80944
80945
80946
80947
80948
80949
80950
80951
80952
80953
80954
80955
80956
80957
80958
80959
80960
80961
80962
80963
80964
80965
80966
80967
80968
80969
80970
80971
80972
80973
80974
80975
80976
80977
80978
80979
80980
80981
80982
80983
80984
80985
80986
80987
80988
80989
80990
80991
80992
80993
80994
80995
80996
80997
809

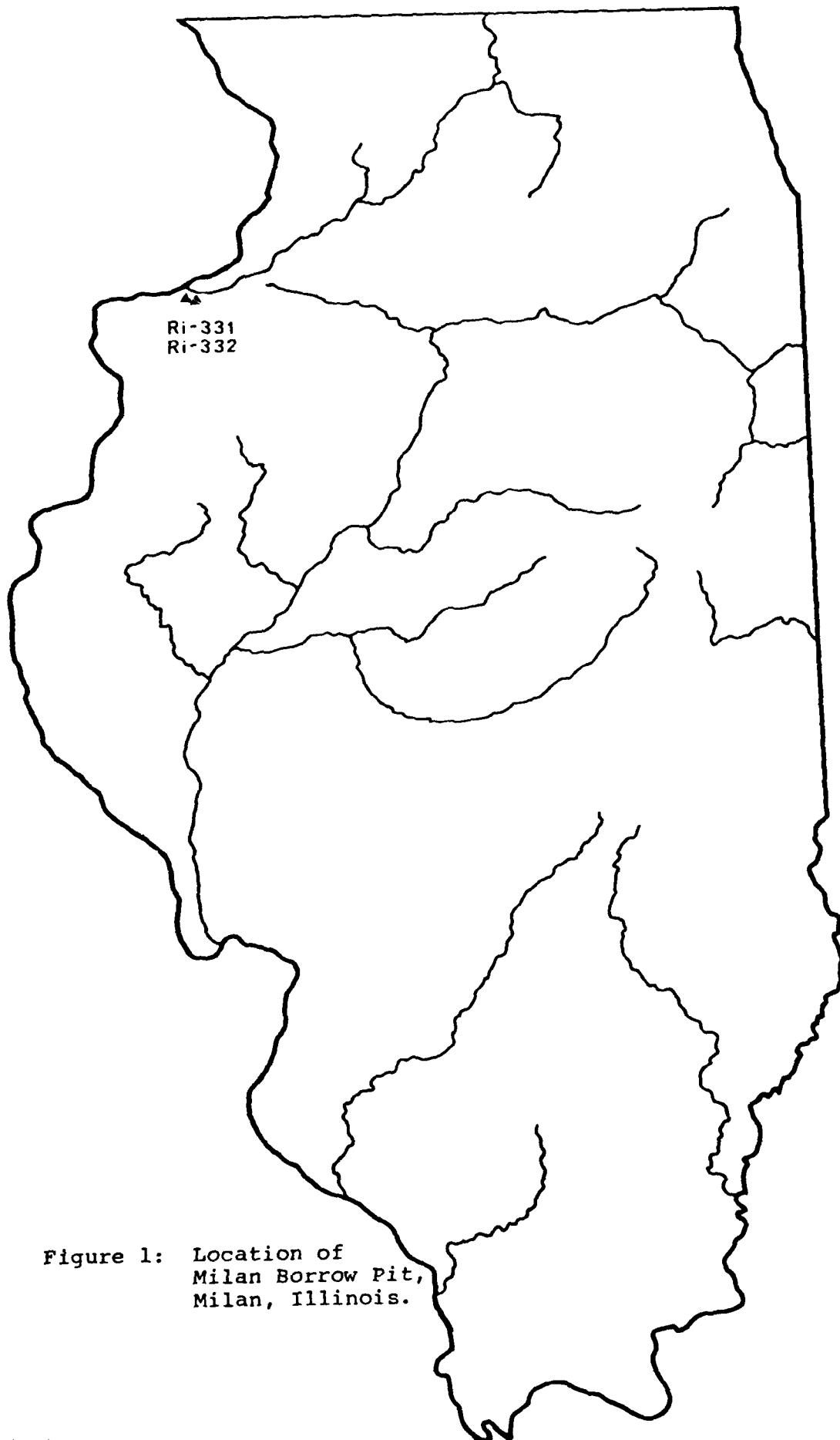


Figure 1: Location of
Milan Borrow Pit,
Milan, Illinois.

TABLE OF CONTENTS

Abstract.....	i
List of Figures, Tables, and Appendices.....	iv
Introduction.....	1
Environmental Setting.....	2
Soil Analysis.....	3
Review of Literature.....	4
Methodology/Research Plan.....	6
Results of Investigation.....	8
Analysis of the Assemblage.....	10
Conclusions and Recommendations.....	19
References Cited.....	22

LIST OF FIGURES

Figure	Page
1 Location of Milan Borrow Pit sites Milan, Illinois.....	ii
2 Distribution of materials and excavation units at 11 RI-331.....	13
3 Artifacts from 11 RI-331.....	15
4 Distribution of materials and excavation units at 11 RI-332.....	18

LIST OF TABLES

Table	Page
1 Frequencies and Percentages of the Lithic Assemblage from 11 RI-331.....	11
2 Weights and Dimensions of Artifacts from 11 RI-331.....	13
3 Percent Contribution by Individual Excavations and Surface Collection.....	13
4 Frequencies and Percentages of the Lithic Assemblage from 11 RI-332.....	17
5 Weights and Dimensions of Artifacts from 11 RI-332.....	17

LIST OF APPENDICES

Appendices	Page
A Milan Quadrangle with boundaries of borrow pit/project area and sites. Area to be borrowed first is hachured.....	24
B Scope of Work.....	26
C Great Lakes Archaeological Research Center, Inc., Proposal.....	31
D Vita of Principal Investigator.....	35
E Correspondence Coordination with Groups Listed in Article I, paragraph I, Scope of Work.....	41

INTRODUCTION

During September, 1980, Great Lakes Archaeological Research Center, Inc., (GLARC), conducted an archaeological inventory for the US Army Corps of Engineers, Rock Island District, near Milan, Illinois, for the Milan local flood protection project. The objectives of the survey were to locate and assess (evaluate) for possible inclusion in the National Register of Historic Places, archaeological sites which might be present in the borrow area, destined to be excavated for construction of the Milan local flood protection project. Appendix A contains a copy of the Milan Quadrangle depicting the boundaries of the borrow pit/survey area. This action is being taken in compliance with the National Environmental Policy Act (NEPA), EO 11593, 33 CFR 305, 36 CFR 63, 36 CFR 800.10, and the National Historic Preservation Act of 1966.

As required by Article II (1) of this Scope of Work (Appendix B), the Staff Archaeologist, Illinois Department of Conservation, and the Illinois Archaeological Survey were contacted for additional information regarding the distribution of known sites in the vicinity. The Illinois Department of Conservation responded favorably to our request for information and provided us with a distribution of known sites within three sections of the project area. That specific information is not included in this report since the inclusion of site locations is not immediately relevant to the objectives of the project.

The Illinois Archaeological Survey Site File Access Policy as approved by its CRM committee in 1978, only allows for the release of information from Historic Sites Survey Part I Summary Reports to non-members. Since those reports are merely cursory, year end generalizations of what was done, they serve little purpose than to tell us that selected portions of the Rock River Valley were surveyed during certain years. Predictive Model Studies Reports, also available to non-members, are of equally negligible utility for the purposes of this investigation. However, the results of this investigation could be incorporated as a test case for the Rock River Predictive Model Study.

A meeting between the principal investigator and the US Army Corps of Engineers, Rock Island District archaeologist served to clarify the boundary ambiguities inherent in Exhibit I, Scope of Work, and to identify the key personnel involved in negotiations between present land owners and the City of Milan, Illinois. The City was contacted by us to ensure that we indeed had access to the parcel identified as the borrow area.

From September 10, 1980 through September 14, 1980, personnel from GLARC conducted survey and test excavations on the borrow area designated in Exhibit I, Scope of Work. During that five day period four separate loci of archaeological material were found; two were isolated finds of one projectile point tip and another of two flakes, while the remaining two were larger surface scatters of lithic debris and artifacts.

The remainder of this report details the various aspects of this study and includes sections on environmental setting, soil analysis, literature review, interviews with local collectors, method of investigation and research plan, analysis of assemblages and research results. The study concludes with a statement on significance and recommendations to the Corps of Engineers, Rock Island District for treatment of the borrow area.

ENVIRONMENTAL SETTING

The gross environmental situation of the project area and the larger Rock-Mississippi River confluence area is the Galesburg Plain, a subdivision of the Till Plains physiographic section of the Central Lowlands province (Leighton, Eckblaw and Horberg 1948). The Galesburg Plain is characterized as level to undulatory with a few morainic ridges and being in a youthful stage of erosion.

Successive stages of extensive glaciation have essentially obliterated preglacial topographic features to the extent that as the above authors note, "Most of the irregularities of the pre-glaical surface were filled in with older drift, so that, . . ., only gross features of the bedrock topography are reflected in the present landscape" (1948). Certain of these features, the Pennsyl-

vanian shale formation for example, are known to outcrop along some Rock River tributaries and provide a source of raw material frequently utilized by aboriginal people in the fabrication of stone tools.

The successive stages of extensive glaciation referred to earlier were ultimately formative for the present course of the Rock River. Modifications to local topography subsequent to the last glaciation are the result of riparian processes including erosion and deposition.

Three main elements make up the topography of Rock Island County: upland plains, broad flood plains, and highly dissected valley sides where steep slopes cause landslides and soil instability. It is the latter erosional feature that holds the borrow area.

Erosion has been especially notable as a factor in micro-topographic alteration in the comparatively recent past, particularly in the more undulating uplands where agriculture has been the prevalent agent of attrition. Generations of annual exposition of undulating hill tops combined with heavy rains have seen intermittent drainages and streams swell with runoff waters and tons of topsoil in suspension. This phenomenon is most evident at the bases of hills where runoff waters deposit surface soil, sometimes several feet deep. Thus, the longstanding practice of agriculture has rendered many hilly areas less eminent than they may have been in an earlier time.

SOIL ANALYSIS

Soils typical of the project area belong to two series, Fayette and Sylvan. The Fayette series soils are confined mainly to hill and ridge tops while the Sylvan series soils comprise the slopes and upper ends of valleys. Fayette soils are subject to erosion if slopes are improperly managed and are most suited to crops grown in the county.

Sylvan soils are generally severely eroded. If the slopes are improperly managed, they are subject to further erosion. Runoff is rapid and most of the original surface layer is eroded away. The soil is usually used for permanent pasture or timber

and is well suited to those uses (Rehner 1977).

One other soil, from the Hickory series, is represented within the project area. These soils form mainly in loamy glacial till under native hardwoods, and are better suited to grasses and legumes or trees than other crops (Rehner 1977). This soil series is predominant on the slopes of an intermittent drainage that passes through the project area. The bottom lands of the drainage have a deep profile of yearly sedimentation although that fact is not noted by Rehner.

Severe erosional tendencies were clearly evident within the project area, especially on the slopes comprised of Sylvan series soils. Most of the area was cropped in corn with rows running across contours. Weed control had been very effective. These two factors provided an exposed surface and conditions for unimpeded runoff of rainwater. Gullies between corn rows were as much as 30 centimeters deep and from 10 to 30 centimeters wide. Erosion was less severe on the less sloping hill tops although there were some shallow gullies leading off to the slopes.

REVIEW OF LITERATURE

There is a limited body of literature with reference to the Rock-Mississippi confluence area, comprised primarily of the reports of early investigations of the Davenport Academy of Natural Sciences. Mound exploration was actively pursued by members of the Academy and results of explorations were occasionally published in the Academy's desultory Proceedings. This accumulated literature, albeit incomplete, provides us with a body of information on the prehistory of an area now largely lost to urban expansion.

Systematic archaeological inventory in the Rock-Mississippi confluence began with the University of Chicago's Survey of Rock Island County (Harrington 1933), the results of which advocated testing a large sample of archaeological sites in order to draw wider conclusions relative to the whole region in lieu of continued survey. The reasoning was that survey would yield redundant information at the expense of loss of definitive componential

information to urban growth and expansion. He was probably half right, that much would be lost to urban, industrial and commercial growth, but continued survey has since resulted in the discovery of in excess of 350 sites in Rock Island County alone.

Roughly 28 years later, archaeological survey was again begun along the lower Rock River within an organizational framework. In 1961 the University of Illinois, Department of Anthropology began to "learn the range and distribution of archaeological sites in the area and something of prehistoric settlement patterns" (Bluhm 1961:1), between the Rock-Mississippi confluence and Sterling, Illinois, 60 miles upstream. According to the preliminary report, a 4 page letter, two cultural horizons were well represented in the valley, Archaic and Late Woodland. The final report never materialized.

During the following year, 1962, the University of Illinois conducted test excavations in at least one shell mound along the Rock River. It had been tested previously, in 1959, but the results of two years of tests have not been reported.

From 1972 through 1977, the University of Wisconsin-Milwaukee Department of Anthropology, Archaeological Laboratories, became actively involved in a regional archaeological survey program, funded by the Department of Interior and administered by the Illinois Archaeological Survey. The purpose of the study was to conduct survey on a number of small scale projects, centering on sections of river valleys where archaeologists were already engaged in on-going research, and to focus on those portions of the river valleys that were either critical to understanding the sequence of cultures in Illinois prehistory or that would face possible destruction by expanding urbanization. That broad charge brought good results in that well over 150 new archaeological sites from the lower Rock River valley were added to the Illinois Archaeological site files. Unfortunately, the extensive data accumulated during this period like that collected by the University of Illinois surveys of the early 1960's, remain unpublished.

Since that time the area has seen only project specific archaeological work (see for example Weichman 1975; Gregg 1976; Overstreet 1976; Van Dyke and Peters 1977; Benchley, Gregg and Dudzik 1977; Van Dyke and Overstreet 1979; Van Dyke, Overstreet and Theler 1980). All of the above referenced projects have been implemented under contract with the Corps of Engineers, Rock Island District, and in relation to local flood control projects. It can be seen from the preceding commentary that investigations of a systematic nature have been confined to two surveys, one conducted during the early 1960's and another during the early and mid 1970's, the results of which have not been adequately reported to be of use to archaeologists working in the area. The remainder of work done in the confluence area has been project related and does not tie into an overall area research design.

As a result of the apparent dearth of available information regarding the local prehistory, the prehistoric sequence for the area is derived largely from information recovered from the larger region. This local sequence has been discussed in detail by other authors (c.f. Van Dyke and Overstreet 1979, Benchley, Gregg and Dudzik 1977), and need not be replicated here. Undoubtedly, however, as more work proceeds in the area, and the previous survey data are fed into the local sequence, a more accurate and informative picture of prehistoric life in the Rock-Mississippi confluence will emerge.

METHODOLOGY/RESEARCH PLAN

The Scope of Work asks for a cultural survey of sufficient scope and quality to allow for determination of eligibility to the National Register of Historic Places for each site located in the borrow area to be excavated for the Milan local flood protection project (Scope of Work: Article I, Appendix B). The necessary procedure to accomplish this task then is an archaeological inventory (survey) to determine whether sites are present, and, in the event that a site(s) was located, an evaluation

(testing) in terms of the specific criteria for inclusion in the National Register of Historic Places.

A three phase research plan was outlined by GLARC, Inc., in a proposal submitted to the Rock Island District, Corps of Engineers (Appendix C). The first phase of research was designed to determine the potential for occurrence of archaeological sites at the borrow area as well as the specific locations of previously reported sites in the study area through consultation with the Illinois Archaeological Survey, the staff archaeologist of the Illinois Department of Conservation, local informants and literature, archive and cartographic review. This effort was partially successful in that area site density information was obtained from the Illinois Department of Conservation archaeologist. In addition, specific information relating to finds in the project area was also made available.

Specific site location information reported by the membership of the Illinois Archaeological Survey and contained in its site files is not available to anyone not a member of the Registry of Professional Illinois Field Archaeologists; therefore, more specific pre-field information was not available to us. However, generally available information from the Illinois Archaeological Survey, as mentioned earlier, was limited and of little utility for the specific objectives of this project.

The success of the literature review has been addressed in the previous section of this report. Information available in the form of technical reports accomplished while under contract with the Rock Island District Corps of Engineers have been documented as well.

A representative of the Quad Cities Area Archaeological Society was contacted to acquire information relative to the specific project area and surrounding environs and for direction toward other informants who might be familiar with area archaeological sites. Our initial contact was with Mr. Farrel Anderson, an individual well acquainted with prehistoric and historic site distributions in the Quad Cities region. Although he was unable to expound on the archaeology of the specific project area, he

was able to direct us to another informant whom he thought to have been active in the area. The informant could not be reached.

The last source relied upon was our own extensive experience in the area. Ultimately, that proved to be the most informative aspect of the pre-field work. In addition, the staff archaeologist of the Illinois Department of Conservation provided us with specific information which we had requested. Appendix E includes correspondence with various agencies consulted during this study.

A complete archaeological inventory of the proposed 75 acre borrow area was indicated as a necessary second phase of research, necessary because our pre-field research effort was not adequate to determine whether or not an inventory had ever been conducted on the designated parcel. The fact that no sites were reported there does not indicate that an inventory had never been done. Inventory would be accomplished by utilizing a combination of techniques including shovel probing, soil coring and surface collection, each whenever appropriate.

The last phase of research, the one to be used in the event that an archaeological site(s) was discovered, would employ controlled excavation units to more accurately determine the nature and extent of the archaeological deposit(s). That is, these units would be utilized to demonstrate whether or not a site(s) would meet the specific criteria for inclusion in the National Register of Historic Places.

RESULTS OF INVESTIGATION

Upon our arrival at the designated parcel we found that approximately 60 of the 75 acres, or about 80% of the area was under cultivation and growing corn. A small portion, under 1%, consisted of tree covered fence lines. The remainder of the area, about 15 acres, comprised the valley floor and walls of an intermittent drainage flowing through the project area and an adjacent farmstead with several out buildings.

The primary method of inventory utilized was surface collection. It was also the only technique employed that resulted in the discovery of any cultural materials. A total of four loci yielded evidence of cultural remains. Two of the loci were found to be isolated finds where some aspect of human behavior resulted in the fortuitous deposit of a broken artifact, in one case, and two flakes in another case.

The remaining loci yielded a greater amount of lithic debris and broken artifacts loosely scattered across the surface of two separate areas within the bounds of the project area (Appendix A). One site, 11 Ri-331, a cultivated hill-top, contained a sparse scatter of debitage and a few broken artifacts over an area of less than 75 meters on a side. The greatest concentrations of both debris and artifacts were collected at the east and west bases of the hilltop. These bases also coincided with the direction of cultivation, slope of the hill and direction of erosional runoff. As much of the debris was recovered from within deep gullies formed by the runoff as was recovered outside the gullies on the slope of the hill and the bases of the hill. Debitage density was considerably lower at the top of the hill where the surface was relatively level. Table 1 presents the frequency and percent of artifacts and debitage collected from the site.

The second site was also a sparse surface scatter of lithic debitage. Similar to 11 Ri-331, the greatest concentration of material from 11 Ri-332 was found at the base of the cultivated slope where the initial discovery was made. Additional surface collection revealed that material was also located upon level ground above the slope but that the density of the scatter was considerably diminished. This scatter continued in an easterly direction across the upper flat area for an additional 30 meters. The north-south distribution of material began 10 meters north of the fenceline and continued for a distance of 50 meters to the north.

Equally similar to the situation at 11 Ri-331 was the coincidence of the direction of cultivation and the occurrence of the largest concentration of artifacts at the base of the slope. As well,

severe erosion was evident and some of the lithic waste material and chunks of cracked rock, presumably from the occupation period, were found in the bottom of erosional gullies on the slope.

The grass covered bottom lands of the intermittent drainage whose slope was in excess of 45° were not investigated. Those areas that were either level or that approached level, were examined using the technique of shovel probing. The interval used was variable between 10 and 15 meters, and was dictated by the situation and the judgement of the field director. No other evidence of archaeological sites were recovered, either during the conduct of shovel probing or surface collection.

ANALYSIS OF THE ASSEMBLAGE

The 13 artifacts and 177 pieces of lithicdebitage recovered from the surface of site 11 Ri-331 are enumerated in Tables 1 and 2. An analysis of lithicdebitage shows that a normal range of shatter, reduction flakes, decortication flakes and cracked rock associated with human behavior are present in the surface collection and in numbers that do not lead one to suspect specialized treatment or procurement of the chert resource at the site.

The raw materials utilized by the occupants of 11 Ri-331 are several in number and vary greatly in quality, ranging from chalky dolomitic chert to very fine grained exotics. One readily identifiable variety is Moline chert from the local Pennsylvanian Spoon formation. However, its occurrence is confined to only three flakes. The remaining varieties are probably from local outcrops with the possible exception of a few exotics. Table 1 describes the frequencies and percentages of the lithicdebitage and tools from the site and the three productive test excavations, while Table 2 gives the dimensions for artifacts and tools. Table 3 lists the percent of the total assemblage contributed by individual test excavations and the contribution from the surface collection. It can be seen from the table that the cumulative total from the three test excavations is only 3.39% of the total. Excavation units 1, 5, 6, 7 and 8 did not yield any cultural material. Figure 2 depicts the distribution of

TABLE 1
Frequencies and Percentages of the Lithic Assemblage from 11 RI-331

	Surface		Test Pit			
	f	%	f	%	f	%
Ground Stone Tools	1	.58				
Projectile Points	2	1.17				
Bifaces	2	1.17				
Knives	1	.58				
Utilized Flakes	3	1.75				
Shatter (including primary and secondary)	71	41.50				
Indeterminate Flakes (Flakes of unknown morphology)	33	19.30				
Flakes of Bifacial Retouch	17	9.94				
Decortication Flakes	30	17.54				
Reduction Flakes	11	6.43				
Hammerstone			1	100		
Battered Cobble					1	25
Totals	171	100			1	100
					4	100

25 fragments of cracked rock not included in totals.

TABLE 2
Weights and Dimensions of Artifacts From 11 RI-331

Provenience	Tool Form	Max. Thickness	Max. Width	Max. Length	Weight(gr.)
Surface	3/4 grooved axe	5.1 cm.	8.7cm	14.0cm.	795.0
	Projectile point base	0.9	2.3	3.3	7.7
	Projectile point base	0.8	2.3	1.4	2.5
	Biface/knife	0.7	1.9	4.5	8.3
	Biface	2.0	4.7	7.2	58.9
	Biface	1.0	2.5	3.1	9.0
	Biface fragment	0.4	0.9	2.0	1.0
	Shatter with uni-facial retouch	2.7	4.4	5.2	37.5
	Utilized flake with opposing notches on lateral edges.	0.5	2.2	3.0	4.2
	Flake with uni-facial retouch	0.9	2.5	3.1	6.7
	Flake with uni-facial retouch	0.6	1.9	3.0	3.5
Test Pit 2	Utilized flake	0.2	0.9	1.8	0.5
Test Pit 3					
Test Pit 4	Hammerstone	4.3	7.6	8.4	401.2

TABLE 3
Percent Contribution by Individual Excavations and Surface Collection.

Test Pit 2		Test Pit 3		Test Pit 4		Surface Collection	Total
f	1	1	4			171	177
%	.56	.56	2.26			96.6	100

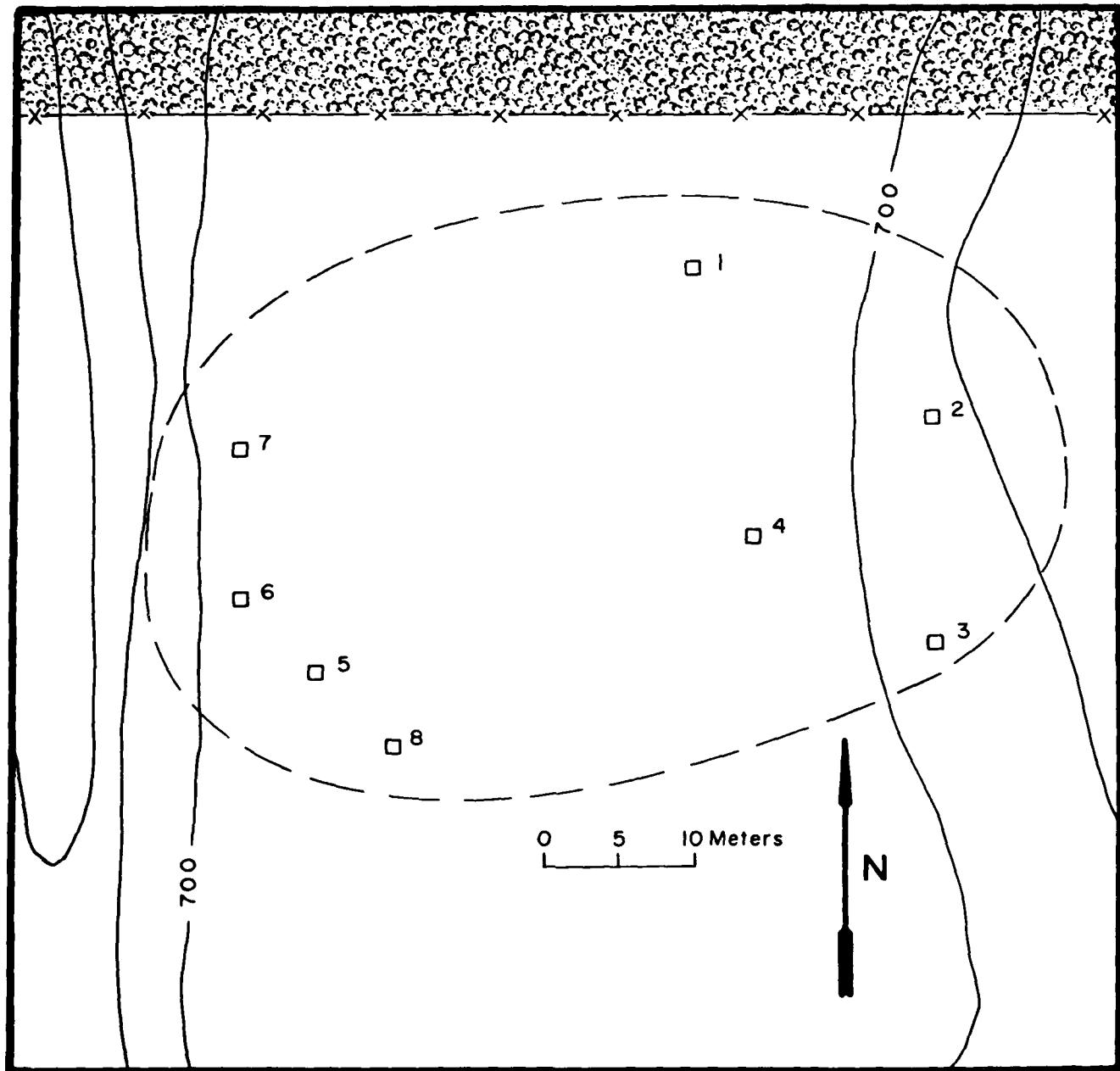


Figure 2: Distribution of materials and excavation units at 11 RI-331.

excavation units across the surface scatter.

Artifacts from the surface of the scatter include a projectile point base, 3.2 cm. long, lenticular in cross section, with flaking that can be described as collateral, although not classic. The point does not have ground edges or base and the material looks as though it may have been flawed to begin with. The piece may have snapped during manufacture thus accounting for the lack of basal and edge grinding, characteristic of a Late Paleo Indian, Early Archaic point. The point, such as it is, is morphologically similar to an Agate Basin, a very common type in the local uplands (Figure 3).

A second, somewhat diagnostic artifact from the surface of the site, is a 3/4 grooved axe. The poll of the axe is broken away and only the bit is polished. The remainder of the axe is pecked smooth (Figure 3).

The second projectile point base listed in Table 2 is not diagnostic.

A review of the three tables does not reveal very much about the function of the site, nor does it answer the question of season of occupation. The composition of the assemblage does not lend itself to much interpretation. However, a surface collection is not a representative sample but a biased collection of categories of objects, the categories changing in direct proportion to the number of times a site is collected. Unfortunately no clarification in our understanding of the site eventuated as a result of the excavations.

The two somewhat diagnostic artifacts from the surface collection allow us to generalize about the occupation. The grooved axe and the broken projectile point base, morphologically akin to an unfinished Agate Basin, indicate that an Early Archaic placement is more appropriate than any other. Chert in various stages of reduction attests to lithic manufacture at the site including raw material reduction (shatter and bifaces) and finished tools (small flakes of bifacial retouch). Fires or hearths are indicated by the presence of non-indigenous cracked rock. The size of the original occupation is undeterminable since years of agriculture have undoubtedly redistributed the materials far and wide of their original locus.

Unfortunately even less can be said of 11 Ri-332 than has been

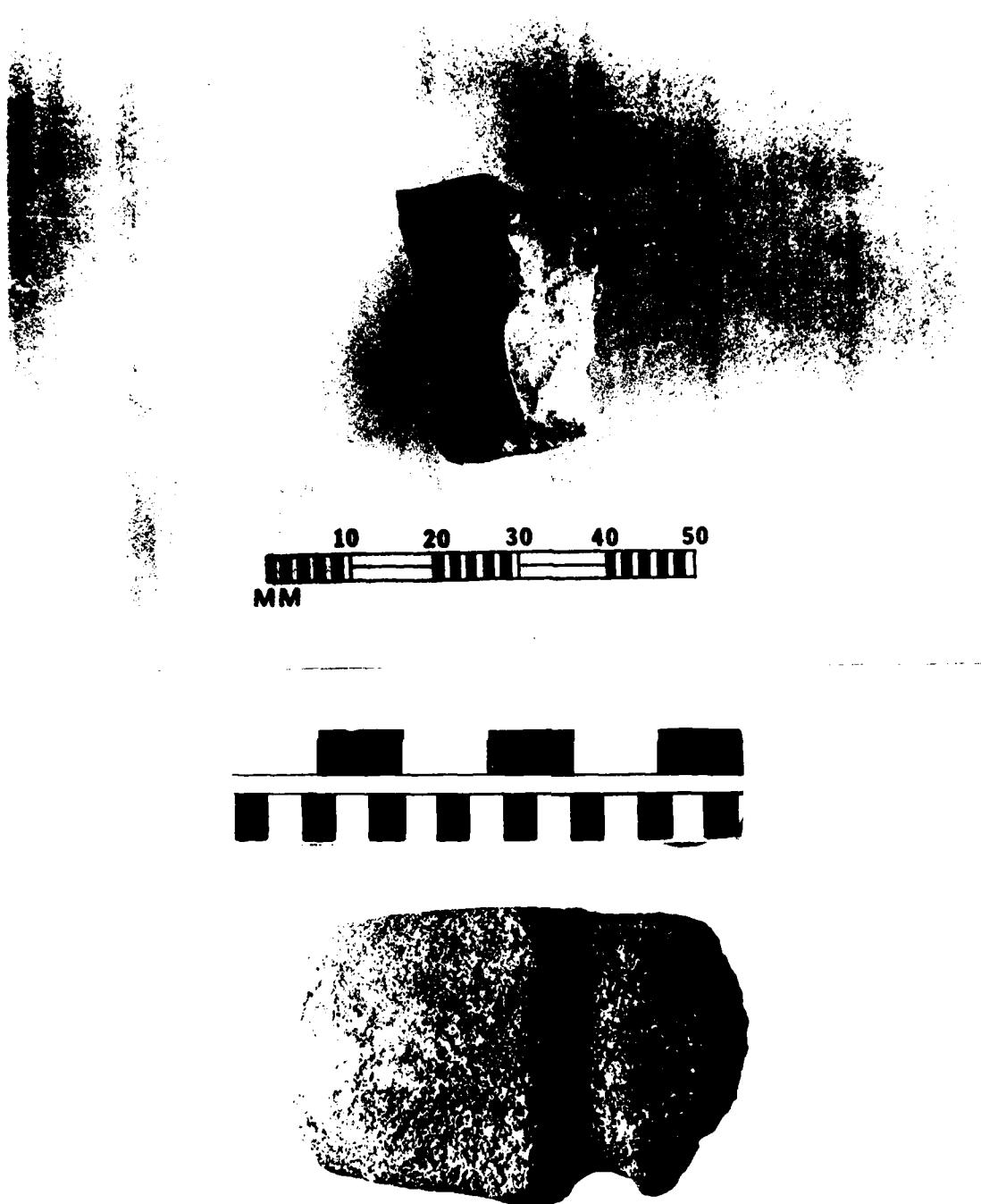


Figure 3: Artifacts from 11 Ri-331

said of 11 Ri-331. Not only can the site function and season of occupation not be determined, but the absence of diagnostic artifacts precludes the assignment of a cultural affiliation. Table 4 lists the frequencies and percentages of the lithic assemblage and Table 5 contains weights and dimensions of artifacts. Again, a range of chert reduction stages is reflected in the assemblage as well as the inferred likelihood of fire or hearths from the presence of cracked rock. While it cannot be unequivocally demonstrated that the cracked rock is a by-product of prehistoric human behavior, the rock is not indigenous to the soil association and must have been transported to the site.

Raw materials utilized by the occupants are similar in variety and quality to those at 11 Ri-331. Only one piece of Moline chert was recovered from this surface collection. Only two artifacts, a utilized flake and a biface were found. Neither one of them allow any speculation as to the cultural affiliation of the site. The size of the original occupation is no longer determinable since the combined agents of attrition, cultivation and erosion, have dispersed the materials down the slope.

A total of nine excavation units were deployed at this site to determine whether or not the site appeared to be confined to the plowzone, a stratum varying in depth from 15 to 40 cm. Figure 4 shows the distribution of the nine units. Table 4 lists the frequencies and percentages of the lithic assemblage from the one productive unit.

Sub-plowzone features or integrity were lacking in all nine units.

The combined techniques of surface collection and excavation failed to locate evidence of seasonality or site function, or diagnostic materials sufficient to assign the site to a cultural period. What the techniques did reveal is that the site is probably entirely contained within the plowzone and that a long history of cultivation and erosion has seen the site diminished to a surface scatter.

TABLE 4

Frequencies and Percentages of the Lithic Assemblage From 11 RI- 332

	Surface		Test Pit 6	
	f	%	f	%
Bifaces	1	3.57		
Utilized Shatter	1	3.57		
Shatter	7	25.00	1	50
Indeterminate Flk. (Flakes of un- known morphol- ogy)	12	42.86	1	50
Flake of Bi- facial retouch	1	3.57		
Decortication Flk.	1	3.57		
Reduction Flake	5	17.86		
Totals	29	100.00	2	100

18 pieces of cracked rock not included in totals.

TABLE 5

Weights and Dimensions of Artifacts From 11 RI- 332

Provenience	Tool Form	Thickness	Max.	Max.	Max.	Weight(gr.)
			Width	Length		
Surface	Utilized Flake	1.8cm.	3.5cm.	5.5cm.	21.0	
	Biface	1.3	3.8	3.2	21.1	

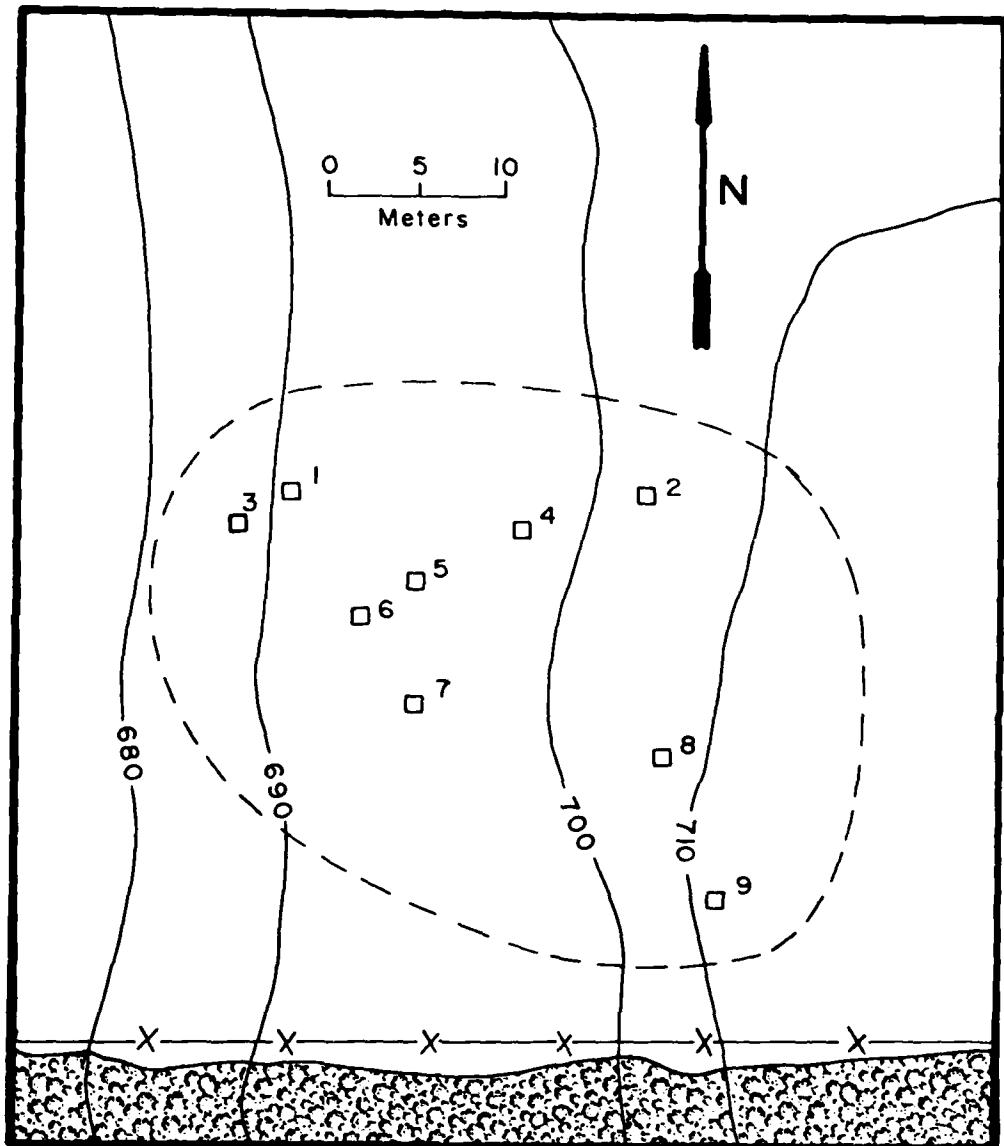


Figure 4: Distribution of materials and excavation units at 11 RI-332.

CONCLUSIONS AND RECOMMENDATIONS

These investigations have located two previously unreported prehistoric archaeological sites in the uplands adjacent to the Rock River in Rock Island County, Illinois. The particular parcel of land where the sites are located is slated to be borrowed away as a result of construction activities associated with the Milan Local Flood Protection Project. An intensive surface collection yielded enough information to enable us to assign one site, 11 Ri-331, to the Early Archaic period, but a dearth of diagnostic information from 11 Ri-332 prohibited an assignment of cultural affiliation.

A total of 17 one meter square units were excavated at the two sites in an effort to determine whether or not any portion of the sites continued below the plowzone. These efforts showed the sites to be contained solely within the plowzone. Further, it is likely that years of agriculture have established prime conditions for accelerating the natural erosional propensity of Fayette, Sylvan and Hickory series soils so that present topography is considerably diminished in altitude from earlier days. Surface distributions of debitage reflect the likelihood that such is the case at 11 Ri-331 and 11 Ri-332. In essence, these two surface manifestations represent the scattered remnants of former loci of human behavior. The present conditions of the materials, i.e., the spatial relationships of objects to each other and the subsoil, no longer provide the basis for useful intrasite comparisons, associations and spatial relationships. The sites do however, provide useful intersite comparison, distribution and environmental spatial patterning information since they have been located and, at least one has yielded diagnostic material.

Since the Milan Local Flood Protection Project construction activities will destroy the sites, the question becomes, are these sites potentially eligible for the National Register of Historic Places? The specific criteria applied to evaluate properties for possible inclusion in the National Register (36 CFR Part 60) allow considerable latitude in evaluating sites. The evaluation process, including field work, laboratory analysis, consultation with

appropriate knowledgeable individuals, literature and archive studies, and the current posture of the professional archaeological community are the tools available to the investigator to aid in arriving at a conclusion.

The professional archaeological community has identified two major concerns for cultural resource management: conservation and preservation. These major concerns have been defined by Salzer and Overstreet (1976):

Conservation of cultural resources is a philosophical principal in management practice which we refer to as "wise spending". In essence, it says that it is impossible to set aside all archaeological sites for future generations; it recognizes that the modern needs of our society for progress and expansion must be met. We must compromise preservation for the future in light of our present needs. Most of the cultural resource management practices in the past have been poor examples of this philosophy (171).

Of preservation they say:

This concept has gained a poor reputation in some areas over the years because it precludes any sort of management at all when carried to its logical conclusions. Also, if such a philosophy were universally accepted, it would amount to disenfranchising the archaeological profession. In the framework of a cultural resource management plan, preservation means setting aside for the future-stockpiling our public heritage to insure the presence of an archaeological data base for the foreseeable future. It is therefore a part of, and not the only part of, a management plan. Knowing what to set aside can only be derived from knowledge recovered from sites which have been excavated in whole or in part. We simply can not set all sites aside. Progress, the public right to its prehistorical heritage, and the needs of the archaeological profession cannot be served by a management plan which involves preservation only (174).

These two concerns, preservation and conservation, comprise the philosophy of cultural resource management which they define:

By our definition, then, cultural resource management is the responsible and judicious act of conserving and preserving the data base of archaeology so as to serve scientific objectives, public education objectives, public and private special interests, and the data base itself (177).

Since the sole remaining value of 11 Ri-331 and 11 Ri-332 lies in their intersite comparative utility and the information already recovered from them, and since they no longer retain integrity or intrasite value, we cannot in good conscience recommend a request for a determination of eligibility for the National Register of Historic Places. Therefore, our recommendation is one of conservation or "wise spending" rather than preservation. We feel it is not necessary for further investigation, recovery or preservation of these sites.

The possibility always exists that a deeply buried remnant or feature of the former sites may still exist. However, we feel that the probability of locating such an elusive unknown is in-calculable. In any event, we suggest that once construction has begun in the borrow area, the Corps of Engineers archaeologist monitor removal of the upper levels of the site loci.

REFERENCES CITED

Benchley, Elizabeth, Michael Gregg and Mark J. Dudzik
1977 Recent Investigations At Albany Mounds Whiteside County
Illinois. Circular Number Two, Illinois Archaeological
Survey.

Bluhm, Elaine
Letter to Mike Gregg, dated 1974.

Gregg, Michael L.
1976 East Moline, Illinois, Local Flood Protection Study
Archaeological Survey. Reports of Investigations, No.1,
Great Lakes Archaeological Research Center, Inc.,
Waukesha, Wisconsin.

Harrington, J.C.
1933 Rock Island County Survey, General Report. University of
Chicago, Department of Anthropology.

Leighton, M.M., G.E. Elblaw and Leland Horberg
1948 Physiographic Divison of Illinois. Journal of Geology
56:16-33.

Overstreet, David F.
1976 An Intensive Archaeological Survey: Davenport, Iowa Local
Flood Protection Project. Reports of Investigation, No.2,
Great Lakes Archaeological Research Center, Inc., Waukesha,
Wisconsin.

Rehner, Richard
1977 Soil Survey of Rock Island County, Illinois. USDA Soil
Conservation Service in Cooperation with Illinois Agri-
cultural Experiment Station.

Salzer, Robert J., and David F. Overstreet
1976 Summary Report: Apostle Islands Project. Unpublished
manuscript on file at Beloit College, Beloit, Wisconsin.

Van Dyke, Allen P. and Gordon R. Peters
1977 An Intensive Archaeological Survey, Milan-Big Island Phase II
Study, Rock River, Illinois. Reports of Investigations No.27,
Great Lakes Archaeological Research Center, Inc., Waukesha,
Wisconsin.

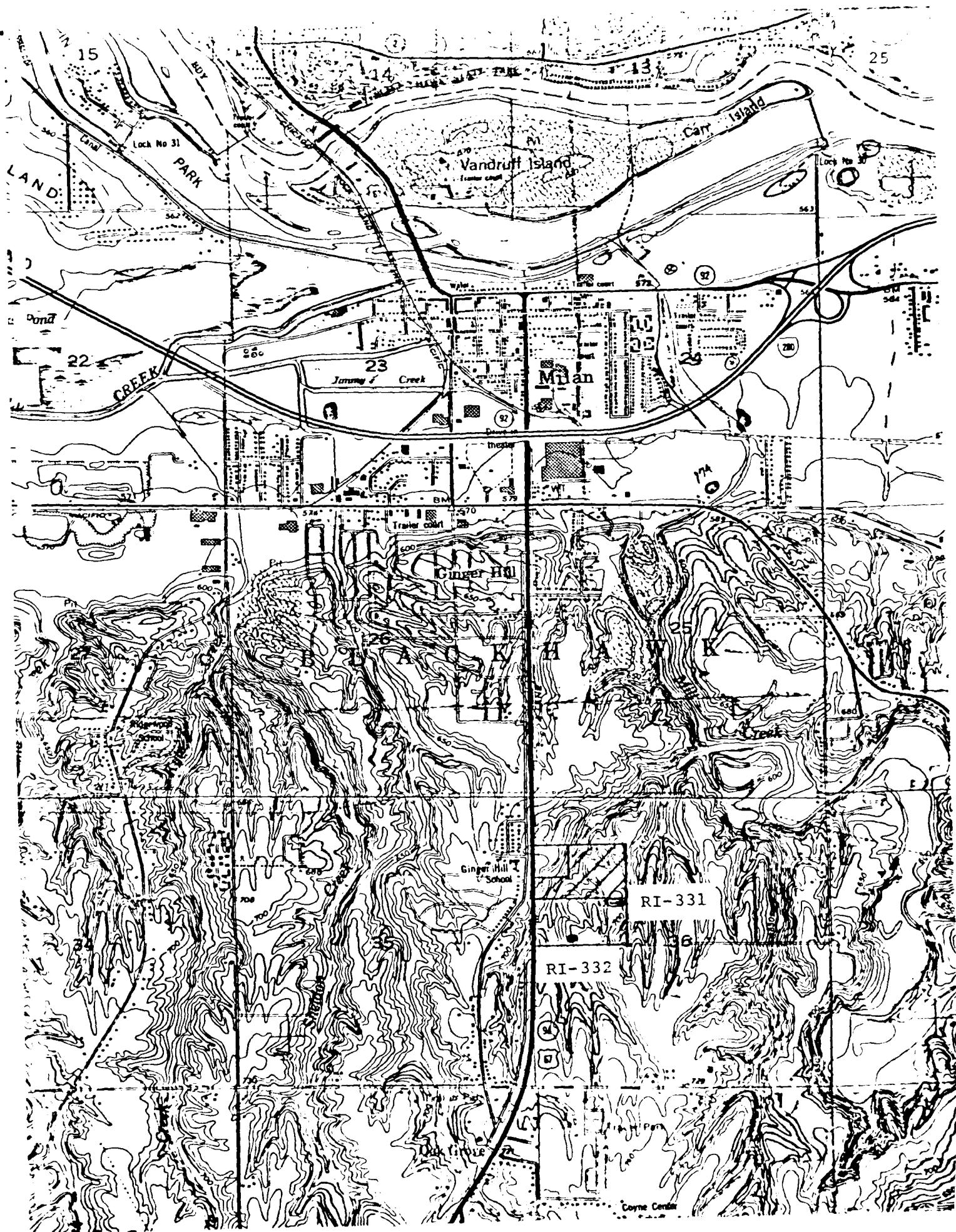
Van Dyke, Allen P., and David F. Overstreet
1979 Archaeological Recovery at 11 RI-337, An Early Middle Wood-
land Shell Midden in East Moline, Illinois. Reports of
Investigations No. 60, Great Lakes Archaeological Research
Center, Inc., Waukesha, Wisconsin.

Van Dyke, Allen P., David F. Overstreet, and James L. Theler
1980 Archaeological Recovery at 11 RI-337, an Early Middle
Woodland Shell Midden in East Moline, Illinois. The
Wisconsin Archaeologist Vol. 61, No. 2.

Weichman, Michael S.
1975 The Milan-Big Island, Illinois Flood Control Project:
An Assessment and Inventory of Archaeological, Historical
and Architectural Resources. Report Number 17, July 1975,
Environmental Research Center, Iowa City, Iowa.

APPENDIX A

Milan Quadrangle with boundaries of
borrow pit/project area and sites.
Area to be borrowed first is hachured.



APPENDIX B

Scope of Work

June 1986

SCOPE OF WORK
FOR ARCHAEOLOGICAL SURVEY OF
PROPOSED BORROW AREA FOR THE
LOCAL FLOOD PROTECTION PROJECT
AT MILAN, ILLINOIS

ARTICLE I.

The survey objectives are to locate and assess, for possible inclusion in the National Register of Historic Places, archaeological sites which may be present in the borrow area to be excavated for the Milan local flood protection project as shown on attached Exhibit I. This action is being taken in compliance with National Environmental Policy Act (NEPA), EO 11593, 33 CFR 305, 36 CFR 63, 36 CFR 800.10, and the National Historic Preservation Act of 1966.

ARTICLE II.

The work to be performed by the contractor under this contract includes:

1. Conduct a literature and cartographic search on the area and contact the Illinois State Historic Preservation Office and Illinois Archaeological Survey for additional information on known sites. Other available sources of information will be consulted and all pertinent information obtained will be documented in the draft and final report.
2. Perform an initial survey of the borrow area designated on Exhibit I which will include shovel testing and coring in areas where surface visibility is limited, to locate any sites within the borrow area that will likely be impacted by the project.
3. Perform a cultural resource survey of sufficient scope and quality to allow for the determination of eligibility to the National Register of Historic Places for each site located. This is to be done as defined in 33 CFR 305.4f, 36 CFR 1204, and 36 CFR 800.10.
4. Recommend measures to mitigate any adverse effects on archaeological site determined to be eligible or to have potential for inclusion in the National Register that is likely to be impacted by this project. Estimates of time and labor required for data recovery and an explanation of how these figures were arrived at shall be included and documented in the report for each recommendation.
5. Basic data description, including provenience and metrics, Universal Transverse Mercator (U.T.M.) coordinates for all sites, photographs, and drawings will be provided for use both in support of the author's arguments and conclusions, and as a source of basic information that may find wider use by other archaeologists. A set of USGS topographic maps showing the specific site locations will be provided by the Contractor but shall not be included in the report to prevent vandalism of cultural properties. At least three good quality photographs of archaeological work in progress and a written summary suitable for public information will be provided by the Contractor.

ARTICLE III.

1. The Principal Investigator shall be responsible for preparing a report on these investigations. This report must include, but is not limited to: (1) Detailed cultural site location with respect to project location; (2) possible cultural affiliations; (3) classification of sites into effect or no effect categories with respect to impact of the action on them; (4) recommendation of: a) further investigation, b) data recovery, c) preservation, or d) no further work, for each site within the borrow area impacted by the project; (5) a discussion specifically addressing the question of eligibility to the National Register for each site likely to be impacted by construction according to the criteria set forth in Appendix A of 36 CFR 63, (6) pertinent information from the literature search; and, (7) documentation of coordination with groups and persons listed in Article II, paragraph 1.

2. The format of the report shall further include but not be limited to the following:

Title Page
Abstract
Table of Contents
Introduction
Environmental Setting
Soil Analysis
Review of Literature
Interviews with Local Collectors
Methodology/Research Plan
Analysis
Research Results
Location for Curation of Artifacts of Each Site
Statement of Significance
Conclusions & Recommendations
Bibliography
Appendices and Maps

3. Appendices to the report will include but not be limited to: 1) this scope of work, 2) vitae of principal investigator, project director and/or field director, and 3) a schedule of field and lab work. The report shall not refer to specific site locations in the body of the report. These references will be listed in an appendix.

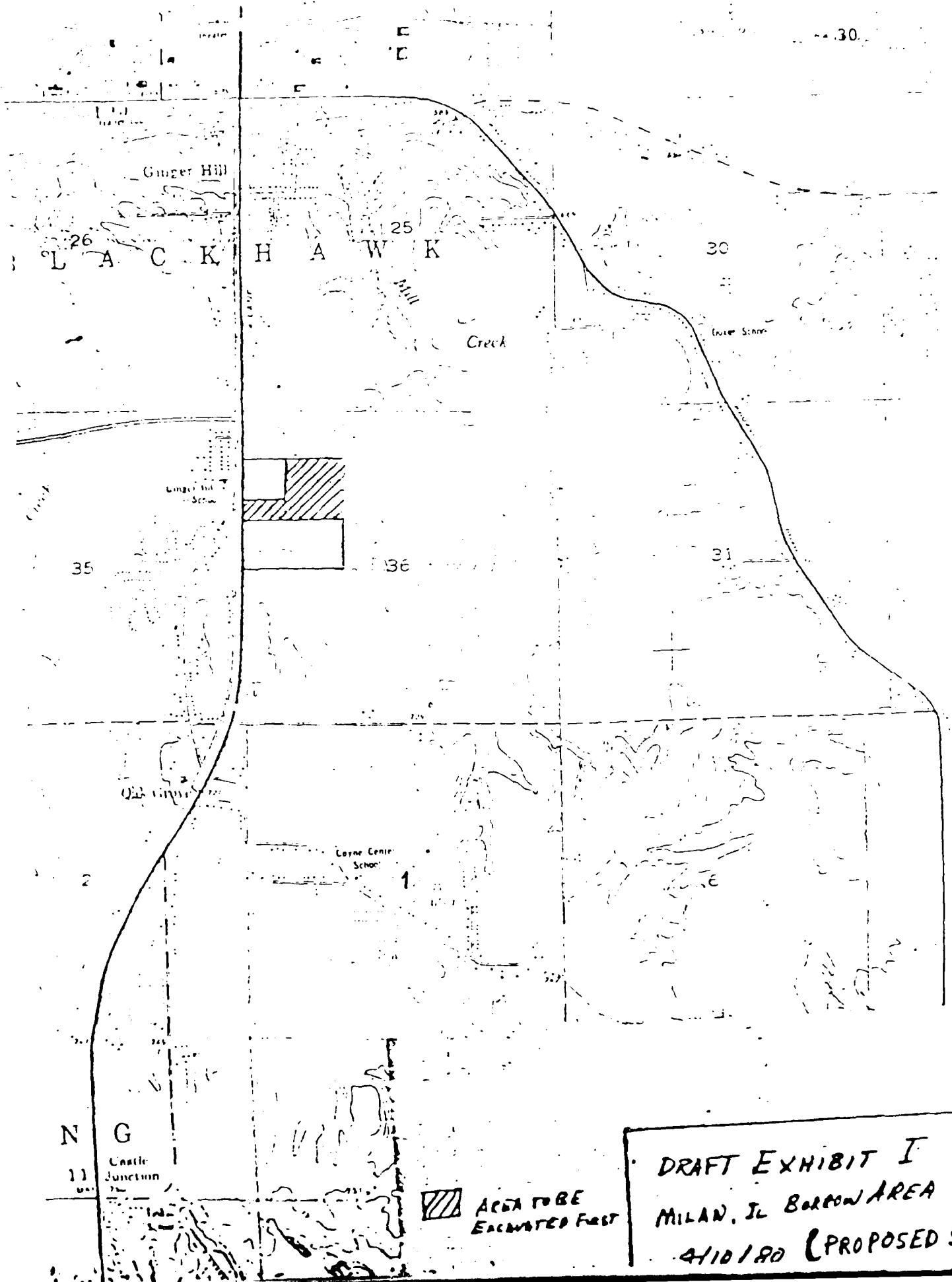
4. All artifacts, cultural material, notes, photographs, and maps collected during the survey shall be deposited with a recognized institution for preservation upon completion of the contract, in coordination with the Heritage Conservation and Recreation Service. All material generated by this contract will remain the property of the US Government. The Contractor is responsible for the security of the material prior to permanent curation.

5. A draft report will be submitted to the Contracting Officer within 45 calendar days after notice of award. The Contracting Officer will furnish review comments to the Contractor 60 days after his receipt of the draft report. The final report is required 30 days after receipt of the Contracting

Officer's comments on the draft report. The draft and final report will be sent by Rock Island District to outside agencies for independent review. The final report shall include as an appendix any letters of review received on the draft report. The Contractor shall furnish the Corps of Engineers with 6 copies of the draft report and 15 copies of the final report.

6. Prior to the acceptance of the report by the Government, neither the Contractor nor his representative shall release any sketch, photograph or report, or material of any nature, obtained or prepared under the contract, without prior specific written approval of the Contracting Officer. After acceptance of the final report its reproduction and use shall not be restricted by either party. The appendix containing the exact site locations will not be included in reports released to the public.

1 Exhibit
As stated



DRAFT EXHIBIT I
MILAN, IL Balcony AREA
4/10/80 (PROPOSED SR)

APPENDIX C

Great Lakes Archaeological Research
Center, Inc., Proposal

Proposal for: Archaeological Survey and Testing for Borrow Area, Milan LFP, at Milan, Illinois.

Submitted to: District Engineer
US Army Engineer District
Corps of Engineers
Rock Island, IL 61201

Submitted by: Great Lakes Archaeological Research Center, Inc.
P.O. Box 1304
Waukesha, WI 53187

Introduction: The following proposal is submitted to conduct an archaeological inventory and evaluation (survey and testing) of archaeological sites which may be located in the proposed borrow area for the Milan local flood protection project as indicated in Request for Quotation, DACW25-80-Q-0391.

Pre-field research:

Prior to deployment of a field crew at the proposed borrow area, literature, archive, and cartographic review will be conducted to determine both the potential for occurrence of archaeological sites at the borrow area as well as the specific locations of previously reported sites in the study area. Sources of information will include, but are not restricted to: (1) sites reported by the membership of the Illinois Archaeological Survey; (2) records of the Illinois State Historic Preservation Office; (3) local informants, including members of the Quad Cities Archaeological Society. Of course, additional sources may be culled from the relevant literature and all sources will be appropriately documented in a references cited section of the final report of investigations.

Methods and Techniques of Field Investigations:

Inventory (survey) Phase: The following methods and techniques will be utilized throughout the project area of approximately 75 acres for the purpose of determining the presence or absence of historic or prehistoric archaeological sites at the proposed Milan borrow area:

(1) Traditional pedestrian survey techniques or surface collection will be employed throughout the project area. This technique, however, will only be adequate as a locational method in areas which have sufficient exposed soil surfaces such as plowed or cultivated fields. To a lesser extent, as in the case of natural erosional surfaces, partial surface collections will also be conducted.

(2) In portions of the proposed project area that have not been subjected to plowing or cultivation and are presently covered with vegetation, i.e., woodlots, pasture, etc., inventory data will be collected through the technique known as shovel testing or shovel probing. Defined here, shovel probing is a technique which employs small excavation units approximately 35 to 45 centimeters in diameter to a depth of 45 to 55 centimeters. Fill from the shovel probes will be passed through a 1/4" mesh screen and after examination of the contents, all probes will be immediately back-filled. All shovel probe units will be situated along predetermined transects with sampling intervals maintained at 15 meters both within and between these transects.

(3) Soil coring will be utilized as an adjunct to shovel probing. Utilizing a standard 1" soil sampler to a depth of one meter has been demonstrated to provide for the determination of shallow buried humus zones that could harbor archaeological deposits. The technique is not to be used as an alternative to shovel probing but as an adjunct to verify stratigraphic interpretations derived from shovel testing. Placement of coring samples is not often systematic because of soil conditions which result in bit refusal and the number and placement are determined both by local soil conditions and the decision of the principal investigator.

Evaluation (testing) Phase: In the event that inventory techniques provide evidence of archaeological deposits, limited test excavation units will be deployed. These test excavation units will consist of formal 2x2 meter squares excavated in arbitrary levels which may be modified to reflect cultural strata should same become apparent during the course of excavation. One liter soil samples will be recovered from each level and from within designated feature contexts, returned to the lab, and subjected to flotation and screening for recovery of micro-flora and fauna. Profiles and plan views as well as photographic will be maintained in accord with professional archaeological standards.

This evaluation will be sufficiently thorough to provide an assessment of the significance and integrity of any archaeological deposit encountered based on the specific criteria for potential inclusion within the National Register of Historic Places. Finally, the basic descriptive data as required in Article II, 5. of the request for quotation will be provided to R.I.D.

Personnel:

The principal investigator and experienced crew members are indicated as necessary and sufficient to conduct these investigations. Laboratory analyses and report preparation allocations are also provided in the attached budget breakdown and cost schedule.

Scheduling:

No problems are foreseen in accomplishing the proposed tasks in a successful manner within the restraints as specified in Article III, 5. of the request for quotation.

Report Preparation:

Reporting procedures for both the draft and final report will be in accord with the specifications stated in Article III, 2., 3., 5., and 6. In addition, we would recommend that the draft report be reviewed by the Illinois Archaeological Survey or other area researchers. Failing this, copies of the final report should be provided to the IAS as part of their data file.

Curation of cultural materials and records:

Curation and materials will be in accord with those specified in the request for quotation. Great Lakes Archaeological Research Center, Inc. assumes the attendant responsibilities for temporary curation until such time as the Corps of Engineers specifies and makes arrangement with an acceptable institution for permanent curation.

APPENDIX D

Vita of Principal Investigator

ALLEN P. VAN DYKE

[PII Redacted] [REDACTED]

Special Areas of Interest:

Upper Mississippian Development. Analysis of Prehistoric Faunal Assemblages. Phosphate Ring Chromatography and Sequential Fractionation of Phosphates and Their Applications for Prehistoric Contexts. North American Prehistory: the Extended Great Lakes. Historical Archaeology

Academic History:

Bachelor of Art in Anthropology, University of Wisconsin-Milwaukee, 1973.

Master of Sci. in Anthropology, University of Wisconsin-Milwaukee, 1978.

Membership in Professional Societies and Organizations:

Plains Anthropological Society

Society of American Archaeology

The Wisconsin Archeological Society, Treasurer, 1974-79, Pres. 198

The Wisconsin Archaeological Survey

Central States Anthropological Society

Papers Delivered:

1975 Discussant, First Annual Conference on Survey in Woodland Environments, Northern Michigan University, Marquette, Michigan.

1975 Preliminary Report on the Diamond Bluff Excavations, The Wisconsin Archeological Society.

1976 Discussant, Second Annual Conference on Survey in Woodland Environments. University of Wisconsin-Marathon County, Wausau, Wisconsin.

Technical Reports:

1976 An Archaeological Inventory of Three Alternate Routes for the Tri-County Expressway in Winnebago, Outagamie, and Calumet Counties. The Great Lakes Archaeological Research Center, Inc., Reports of Investigation, No. 15. Waukesha, Wisconsin.

1977 An Intensive Archaeological Survey, Milan-Big Island Phase II Study, Rock River, Illinois. The Great Lakes Archaeological Research Center, Inc., Reports of Investigation, No. 27. Waukesha, Wisconsin.

Allen P. Van Dyke 2

1977 *Cultural Resources Reconnaissance, Loves Park, Illinois, Interim 2, Flood Feasibility Study.* The Great Lakes Archaeological Research Center, Inc. Reports of Investigations, No. 28. Waukesha, Wisconsin.

1978 *Cultural Resources Reconnaissance For The Des Moines River Bank Erosion Study.* The Great Lakes Archaeological Research Center, Inc. Reports of Investigation No. 32. Waukesha, Wisconsin.

1979 *Archaeological Recovery at 11-RI-337--An Early Middle Woodland Shell Midden in East Moline, Illinois.* The Great Lakes Archaeological Research Center, Inc. Manuscript in preparation. Waukesha, Wisconsin.

1979 *Cultural Resource Survey and Evaluation of a Historic Site (47 Fr-103), Nicolet National Forest, Forest County Wisconsin.* Great Lakes Archaeological Research Center, Inc., Reports of Investigation No. 85.

1980 See page 5 of this Vita.

PUBLICATIONS

1980 Archaeological Recovery at 11 RI-337, an Early Middle Woodland Shell Midden in East Moline, Illinois. *The Wisconsin Archeologist*, 61(2):125-265.
(with David F. Overstreet and James L. Theler)

Employment History:

Military History-U.S.Army, one year Viet Nam service. Honorable discharged, December 1968.

1969 Student, Electronic Computer Programming Institute, Appleton, Wisconsin. Graduated.

1969-1970 J.C.Penney Company, Inc., Milwaukee, Wisconsin. Computer Section.

1970-1973 Child care staff, residential treatment center for emotionally disturbed, delinquent adolescents. Community Care Services, Inc.

1975 Scientific Assistant, Milwaukee Public Museum, History Department.

1973-1978 Graduate student in Anthropology, University of Wisconsin-Milwaukee.

1978-Present Principal Investigator, Great Lakes Archaeological Research Center, Inc.

Archaeological Field Experience:

1971 Summer, 5 weeks, Participant, Field Seminar in Archaeological Methods, the Pipe Site. The Wisconsin Archeological Society.

1972 Summer, 8 weeks, Student, Field School in Archaeology, University of Wisconsin-Milwaukee. Pipe Site.

1972 Fall. Participant, First Annual Field Seminar in Lithic Technology, Hixton Quarry Site, Wisconsin.

1973 May-June. Participant, Archaeological Field School, University of Wisconsin-Waukesha County.

1973 September-October. Rock River Archaeological Survey, Rock River Area, Northern Illinois. University of Wisconsin-Milwaukee. Illinois Archaeological Survey.

1973 October-November. Archaeological Survey of the Wood County and Haven Site Nuclear Power Plants, University of Wisconsin-Milwaukee. Wisconsin Electric Power Company.

1974 April. Archaeological Survey, Phase II testing and preparation of report and recommendations for Commonwealth Edison Power Company Occasional Survey and Testing in Ogle County, Illinois.

1974 May-June. Archaeological Methods Course, University of Wisconsin-Waukesha.

1974 June-August. Teaching Assistant, University of Wisconsin-Milwaukee Field School, Diamond Bluff Site.

1975 March-July. Scientific Assistant, Milwaukee Public Museum. Architectural drawing and drafting, museum display preparation, ceramic reconstruction, supervision of volunteers and students, typological organization of ceramic assemblage from Tell Hadidi, Syria.

1975 July-September. Field Crew Supervisor, Madeline Island Sewer Project Salvage Excavation. Beloit College, Wisconsin.

1976 Field Supervisor, Archaeological Survey of the Rock River Valley, Moline, Illinois. Historic Site Survey Program, University of Wisconsin-Milwaukee.

1976 Phosphate Lab Supervisor. Phosphate Analysis in Archaeological Survey, Cahokia Mounds Project, University of Wisconsin-Milwaukee. Eight weeks.

1976 Field Assistant, Phase II Assessment of Sites Located in the Proposed Pleasant Prairie Power Facility Site, Kenosha County, Wisconsin. The Great Lakes Archaeological Research Center, Inc., Reports of Investigation, No. 4.

1976 Field Assistant, Site Inventory for Town of Norway Sanitary District No. 1. The Great Lakes Archaeological Research Center, Inc., Reports of Investigation No. 5.

1976 Field Director, Archaeological Inventory and Evaluation, Walworth County Metropolitan Sewer District. The Great Lakes Archaeological Research Center, Inc., Reports of Investigation No. 12.

1976 Field Director, Archaeological Survey for Fox River Navigation Project Disposal Sites. The Great Lakes Archaeological Research Center, Inc., Reports of Investigation No. 13.

Allen P. Van Dyke 4

1976 Field Assistant, Inventory of Proposed Wastewater Treatment Plant and Interceptor Route, Town of Juneau, Dodge, County, Wisconsin. The Great Lakes Archaeological Research Center, Inc., Reports of Investigation No. 14

1976 Field Supervisor, Archaeological Inventory of Three Alternate Routes for the Tri-County Expressway in Winnebago, Outagamie and Calumet Counties. The Great Lakes Archaeological Research Center, Inc., Reports of Investigation No. 15.

1977 Field Supervisor, An Intensive Archaeological Survey Milan-Big Island Phase II Study, Rock River, Illinois. The Great Lakes Archaeological Research Center, Inc., Reports of Investigation No. 27.

1977 Field Assistant, various survey and excavation projects in Iowa, Illinois and Wisconsin [i.e., Cochrane, Sturtenant, Germantown, Mukwonago, Brillion, Butte des Mortes, Eagle Lake, National Forest Service, Lake Michigan Harbors, Loves Park, Bay Beach State Park, Sturgeon River Gorge, Flynn and Round Lake Wilderness Study Areas], The Great Lakes Archaeological Research Center, Inc.

1977 Excavator, Rolette House Historic Site, Prairie du Chien, Wisconsin.

1978 Research Assistant, various technical reports of the Great Lakes Archaeological Research Center, Inc. Field Director, Archaeological Recovery at 11-RI-337, East Moline, Illinois.

1979 Lecturer, U.S. Forest Service Paraprofessional Training Program, Eagle River, Wisconsin. Session given for U.S. Forest Service, Region 9.

1979 Field Director/Research Assistant, Archaeological Survey of the East Shore of Lake Winnebago: 19/9. Investigations carried out with the assistance of a matching grant-in-aid from the Office of Archaeology and Historic Preservation, U.S. Department of the Interior, under provisions of the National Historic Preservation Act of 1966. The grant-in-aid was administered by the State Historical Society of Wisconsin, Historic Preservation Division. Match provided by Great Lakes Archaeological Research Center, Inc.

1979 Principal Investigator, Cultural Resource Survey and Evaluation of a Historic Site (47 Fr-103), Nicolet National Forest, Forest County, Wisconsin. Evaluation and survey required five weeks of work in the Nicolet National Forest and evaluation of a 1904-1907 logging camp for the National Register of Historic Places.

Allen P. Van Dyke 5

1980 Field Director/Research Assistant

Archaeological Survey and Test Excavations along the East Shore of Lake Winnebago: 1980. Second year of Investigations carried out with a matching grant-in-aid from the Office of Archaeology and Historic Preservation, US Department of Interior, under provisions of the National Historic Preservation Act of 1966. The grant-in-aid was administered by the State Historical Society of Wisconsin, Historic Preservation Division. Match was provided by GLARC INC.

1980 Principal Investigator.

Archaeological Inventory and Evaluation of the Proposed Janesville Sewer right-of-way. Letter submitted to City Engineer, City of Janesville, Wisconsin

1980 Principal Investigator

Archaeological Inventory and Evaluation for the City of Fort Atkinson, T-3 Interceptor Sewer Project.

APPENDIX E

Coorespondence Coordination with Groups
Listed in Article I, paragraph I,
Scope of Work

Great Lakes Archaeological Research Center, Inc.*Cultural Resource Management*

P.O. BOX 1304
WAUKESHA, WISCONSIN 53187
(414) 445-3957

September 18, 1980

Mr. Roy Eichhorn
US Army Engineer District
Rock Island Corps of Engineers
Clock Tower Building
Rock Island, IL

Dear Roy:

Enclosed please find a xerox copy of the Milan Quadrangle showing the boundaries of the survey (borrow pit) area and the location of two surface sites we discovered. By comparing this copy to an actual topographic map you will be able to locate the sites on the ground yourself if need be. This should be adequate for your purposes at present. The draft report will be forthcoming pending arrival of information from the Illinois Archaeological Survey.

Sincerely,

Allen P. Van Dyke

Enclosure

Great Lakes Archaeological Research Center, Inc.*Cultural Resource Management*

P.O. BOX 1304
WAUKESHA, WISCONSIN 53187
(414) 845-3957

September 18, 1980

Dr. Margaret Brown
405 East Washington St.
Springfield, IL 62706

Dear Dr. Brown:

As per our telephone conversation of this day, enclosed please find a Xerox copy of the Milan Quadrangle depicting the area surveyed by us and showing the locations of two sites we discovered during the survey. As I mentioned during our conversation, this survey was conducted for the Rock Island District, Corps of Engineers. The Illinois Archaeological Survey has been notified of the discovery of the sites and we are presently awaiting their assignment of site numbers.

It would be useful for us to have some idea of the distribution of archaeological sites between the dissected uplands and the Rock floodplain in the more immediate area of the project before writing a final report of investigations since that distribution might have some effect upon our thinking. More specifically, we would be interested in receiving any information on sites within the following sections:

Milan Quadrangle
Black Hawk Township
T17N, R2W, Sections 23, 24, 25, 26, 35 and 36,

and,

Coal Valley Township
T17N, R1W, Sections 19, 30 and 31.

We have already requested this information from the Illinois Archaeological Survey but, in compliance with their policy of not allowing access to site files to non-registered Illinois professional contract archaeologists, our request was denied.

Sincerely,

Allen P. Van Dyke

AVD:hs
Enclosure

Illinois

Department of Conservation

Life and Land together

605 W.M. G. STRATTON BUILDING • 420 SOUTH SPRING STREET • SPRINGFIELD 62701
CHICAGO OFFICE - ROOM 100, 160 NO. LASALLE 60601

David Kenney, Director • James C. Hettner, Assistant Director

September 24, 1980

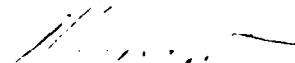
Mr. Allen P. Van Dyke
Great Lakes Archaeological
Research Center, Inc.
P.O. Box 1304
Waukesha, WI 53187

Dear Al,

The circles in Section 19 NE $\frac{1}{4}$ appear to correspond to the position of Ri-379 which is listed only as an "occupation" on the form. The site in Section 24 is Ri-174 which is listed as the Bend Site, an Archaic Habitation. We have no sites in Section 36 and no indication of previous surveys there.

Section 19 contains 4 additional sites; Section 30, 5; Section 25, 4; Section 24, 2; Section 31, 8; Section 26, 2. The areas surveyed appear to be by the stream drainages and on the bluff and floodplain near the river.

Sincerely,


Margaret Kimball Brown
Staff Archaeologist

MKB/lsa

Great Lakes Archaeological Research Center, Inc.Cultural Resource Management

P.O. Box 1304
WAUKESHA, WISCONSIN 53187
(414) 245-3957

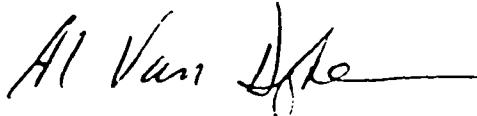
September 20, 1980

Mr. Charles J. Baeris
Department of Anthropology
109 Davenport Hall
University of Illinois-Urbana
Urbana, IL 61801

Dear Mr. Bareis:

Enclosed please find copies of IAS site survey forms and Milan Quadrangles locating two archaeological sites discovered by Great Lakes Archaeological Research Center, Inc., while conducting investigations for the Rock Island District, Corps of Engineers in the Milan, Illinois vicinity. Would you please advise us when you have assigned site numbers so that we can ensure proper cataloging and curation of the artifacts from these sites.

Sincerely,



Allen P. Van Dyke

AVD:hs
Enclosures



ILLINOIS ARCHAEOLOGICAL SURVEY

109 DAVENPORT HALL

UNIVERSITY OF ILLINOIS

URBANA, ILLINOIS 61801

Cooperating Institutions
University of Illinois
Southern Illinois University
Illinois State Museum

29 September 1980

Mr. Allen P. Van Dyke
Great Lakes Archaeological Research Center, Inc.
P.O. Box 1304
Waukesha, Wisconsin 53187

Dear Mr. Van Dyke:

We have received your letter of September 20 and enclosure of the two completed IAS site survey forms.

The following site numbers have been assigned to the forms:

Field No. 1 11-Ri-331

Field No. 2 11-Ri-332

Thank you for this information.

Cordially yours,

Charles J. Bareis
Charles J. Bareis
Secretary-Treasurer

CJB/ms



DEPARTMENT OF THE ARMY
 ROCK ISLAND DISTRICT, CORPS OF ENGINEERS
 CLOCK TOWER BUILDING
 ROCK ISLAND, ILLINOIS 61201

REPLY TO
 ATTENTION OF:

NCRED-PB

2 DEC 1981

Mr. Allen P. VanDyke
 Great Lakes Archaeological Research
 Center, Inc.
 P.O. Box 1304
 Waukesha, Wisconsin 52187

Dear Mr. VanDyke:

We have completed our review of the draft report Archaeological Survey and Testing for Borrow Area, Milan, Illinois, Local Flood Protection Project, which you submitted under the terms of our purchase order DACW25-80-M-1795.

On the whole, we are quite pleased with the report and our comments and those of the Illinois State Historic Preservation Office (copy inclosed) are directed at clarification.

First, we are curious about the site numbers. We understand you had difficulty getting them and they appear to be out of sequence given that RI-337 was assigned several years ago. Secondly, in Table 1 you have a category of "knives". How is this artifact defined, by form or function?

Editorial comments are made in the copy of the report we are returning and should be dealt with as necessary. Please make sure to modify the final report to address the SHPO's comments as well.

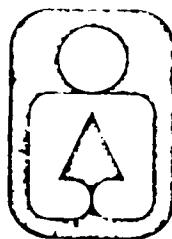
If you have any questions, please contact Roy Eichhorn at 309/788-6361, Ext. 349. We look forward to your final report.

Sincerely,

Fred E. Fllickinger
 FRED E. FLICKINGER
 Contracting Officer

2 Incl
 As stated

Illinois



Department of Conservation

life and land together

605 WM. G. STRATTON BUILDING • 400 SOUTH SPRING STREET • SPRINGFIELD 62706

CHICAGO OFFICE - ROOM 100, 160 NO. LASALLE 60601

David Kenney, Director • James C. Helfrich, Assistant Director

November 7, 1980

Doyle W. McCully, P.E.
Chief Engineering Division
Department of the Army
Rock Island District Corps
Clock Tower Building
Rock Island, IL 61201

Dear Mr. McCully:

My staff archaeologist has reviewed the draft report "Archaeological Survey and testing for Borrow Area, Milan, Illinois, Local Flood Protection Project" prepared by Great Lakes Archaeological Research Center, Inc. The following comments were made concerning the report.

Page 10, 2nd paragraph. What percentage of the area investigated is represented by the "grass covered bottom lands"? The definition "either level or that approached level" would be better expressed by degree of slope. What degree of slope was considered excessive for utilization?

Page 16, 2nd paragraph. The number of test units for R-332 is given but not for R-331.

Other than these comments and the needed clarification the report appears to adequately describe the evaluation of the area and sites. Sites R-331 and R-332, on the basis of the findings, do not appear to be eligible for the National Register of Historic Places.

Sincerely,

David Kenney
State Historic Preservation
Officer

DK/MLB/lsa